

Óbuda University, Donát Bánki Faculty of Mechanical and Safety Engineering		Institute for Natural Sciences and Basic Subjects (TAI)	
Name and code of the subject: Machine Design III. (English course) <i>BBWGGE6BNE</i> Credits: 2			
Faculty: Mechatronics			
Course leader:	Dr. Tibor J. Goda	Lecturer:	Dr. Tibor J. Goda
Prestudy conditions (code)	Machine Design I. and Machine Design II.		
Weekly teaching hours:	Lecture: 2	Classroom practice.: -	Lab: 2
Type of exam:	exam		
Curriculum			
The objective of the course: The students study the basic knowledge of mechanical drives and driving systems. The main topics: electric motors, rolling bearings, rolling bearing arrangements, flat belt drives, V-belt drives, friction drives, spur gears and helical gears, gear boxes.			
Schedule and requirements			
Educational weeks			
1.	Fundamentals. Electric motors.		
2.	Rolling bearings		
3.	NO TEACHING		
4.	Rolling bearing arrangements.		
5.	Problem solutions.		
6.	Flat belt drives.		
7.	NO TEACHING		
8.	Problem solutions.		
9.	V-belt drives.		
10.	Problem solutions.		
11.	Friction drives.		
12.	Spur gears. Helical gears.		
13.	Gear boxes.		
14.	Problem solutions.		
Tasks in the semester			
Week	Homework assignment		
2.	Hand out of the homework assignment (Mechanical drive, max. 40 points) Due date: week 14		
	Writing examination in the examination period		
	Writing examination (max. 60 points)		
Conditions for the signature: Students must participate in at least 70% of all classes and both homework assignments must be solved and submitted (max. 40 points). Otherwise, the semester is invalid. If the quality of the homework does not reach the acceptable level (20 points out of 40 points), then it must be revised and resubmitted before the end of the lecture period. For late submission of the homework extra fee must be paid. The examination is available for students with signature only.			
Examination: writing exam (max. 60 points). The final grade will be established based on the points from the writing exam. Grading policy: 0-50 points: fail (1); 51-62 points: pass (2); 63-74 points: satisfactory (3); 75-84 points: good (4), 85-100 points: excellent (5).			
Bibliography:			
Dr. Elinger, I.- Dr.Goda, T.: Engineering Design (Theory and practice) BMF BGK 3022, 2006 handouts			
The quality control methods of subject: feedback by the quality control meeting of students and teachers			

1st of February, 2023

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Course leader